UNITED STATES DEPARTMENT OF AGRICULTURE
MISCELLANEOUS PUBLICATION No. 263

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# A GRAPHIC SUMMARY OF THE VALUE OF FARM PROPERTY

## (BASED LARGELY ON THE CENSUS OF 1930 AND 1935)

By

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and

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Bureau of Agricultural Economics


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This publication is one of a projected series of 10 publications, as follows:

A Graphic Summary of Physical Features and Land Utilization in the United States---------- O. E. Baker
A Graphic Summary of Farm Tenure---------- H. A. Turner
A Graphic Summary of Farm Taxation---------- Donald Jackson
A Graphic Summary of the Value of Farm Property. B. R. Stauber and M. M. Regan
A Graphic Summary of Farm Machinery, Facilities, and Expenditures---------- O. E. Baker
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A Graphic Summary of the Number, Size, and Type of Farms, and Value of Products---------- O. E. Baker
A Graphic Summary of Farm Crops-- O. E. Baker and A. B. Genung
A Graphic Summary of Farm Animals and Animal Products---------- O. E. Baker
A Graphic Summary of Farm Mortgage Debt. D. L. Wickens and N. J. Wall

This series, which has been prepared under the general direction of O. E. Baker, senior agricultural economist, will bring up to date the Graphic Summary of American Agriculture published in 1931 as Miscellaneous Publication 105.

The Graphic Summary of American Agriculture first appeared in the 1915 Yearbook of Agriculture (also issued as Yearbook Separate 681), and was largely based on the 1910 census. The second was contained in the 1921 Yearbook (also issued as Yearbook Separate 878), and was based largely on the 1920 census. The third was published as Miscellaneous Publication No. 105, in May 1931, and was based both on the 1925 Agricultural Census and on the annual estimates of the Bureau of Agricultural Economics. It was divided into 11 sections, but these sections were bound together and issued only as a single bulletin. It was more inclusive than previous issues, particularly of maps and graphs relating to the economic and social aspects of agriculture.

The publications in this series devote still more attention to economic and social conditions. They are based on both the 1930 and 1935 census reports, as well as the annual estimates of the Bureau of Agricultural Economics. They deal not only with changes between 1930 and 1935, but also, though very briefly, with the changes during the decade of urban prosperity and agricultural depression that preceded the more general depression. Most of the distribution maps for crops and many of those for livestock present the 1929 census returns, because the drought of unprecedented severity and extent in 1934 would make such maps for 1934 misleading. Several increase and decrease maps, however, show the changes that occurred between 1929 and 1934, or 1930 and 1935.

The graphic presentation was designed and drafted under the direction of R. G. Hainsworth, in charge of the graphic section of the Bureau of Agricultural Economics.

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# A GRAPHIC SUMMARY OF THE VALUE OF FARM PROPERTY

## (BASED LARGELY ON THE CENSUS OF 1930 AND 1935)

By B. R. Stauber, *senior agricultural economist*, and M. M. Regan, *associate agricultural economist, Bureau of Agricultural Economics*

The most drastic changes in farm-property values in the history of American agriculture have occurred during the last quarter century. From 1910 to 1920 the value of farm property rose 90 percent, then declined over 26 percent from 1920 to 1930, and by 1933 reached a level that was under that of 1910. During the last 3 years farm-property values have risen on a country-wide basis, owing largely to the increase in farm real estate values, which comprise over four-fifths of the total value of farm property. In the principal agricultural sections, the recent rise began from levels that were lower than those of 1910, and marks the first upward movement since before 1920. Current interest centers largely in the immediate situation and in future trends, but the degree of dependence upon past experience in evaluating the present as well as prospective developments renders valuable a review and portrayal of some of the more conspicuous changes in farm-property values since 1910.

The first group of maps and graphs (figs. 1–4) deals with the geographic distribution of the total value of all farm property as well as its division according to classes. The Corn Belt is the most evident area of heavy concentration of property values, although the proportion of value centered in this area has declined somewhat since 1920. This decline is due largely to the greater declines in the value of farm real estate, especially land alone, that took place in this area after 1920.

For the country as a whole, farm real estate in 1930 comprised 83.6 percent of the total value of farm property, a smaller proportion than at any time since 1910, and land alone constituted 61 percent of the total, the lowest proportion since data became available in 1900. From 1910 to 1930 the proportion of the total value of farm property represented by buildings increased from 15.4 percent to 22.6 percent; that represented by machinery and equipment increased from 3.1 percent to 5.8 percent; and the proportion represented by

livestock declined from nearly 11.5 percent in 1910 to 9.5 percent in 1925, rising to 10.6 percent in 1930. These changes in relative importance reflect changes in prices as well as changes in numbers and in quality. From 1925 to 1930, the value of livestock rose, largely as a result of increases in prices, particularly of cattle. Tractors and motortrucks continued to displace horses and mules, contributing to the increase in the value of implements. The decline in real estate values was due mostly to declines in per-acre values.

Although farm real estate was the only class of farm property for which values were ascertained in the 1935 census, the estimate of the total value of farm property in 1935 made by the Bureau of Agricultural Economics, indicates a level approximately one-third under that of 1930. From 1930 to 1935 the relative importance of land and buildings combined increased, that of implements and equipment remained about constant, and that of livestock fell to a new low.

The second section of maps and graphs (figs. 5–15) relates to various aspects of the changes in value of farm real estate. Most of these graphs deal with changes up to 1930, although figures 12 and 13 present data on per-acre values and percentage changes in per-acre values, based on 1935 census data. The United States average value of farm real estate was $31.16 per acre in 1935, a reduction of 35.8 percent from the value in 1930, and 21.3 percent under that of 1910. From 1930 to 1935 the aggregate value of farm real estate declined 32.4 percent to a point 5.6 percent below the 1910 aggregate. An increase of 6.9 percent in the land in farms was reported for the 5-year period. The average value of farm real estate per farm in 1935 was $4,823, which was 36.7 percent below that of 1930, and 11.8 percent lower than in 1910.

Figure 14 shows trends in the Bureau of Agricultural Economics index of farm real estate values, by census divisions, up to the year ended March 1, 1936. This figure indicates that the low point in farm real estate values was reached in 1933 and that per-acre values have been increasing at about 4 percent a year since that time. The most substantial gains have taken place in the Southern and the North Central States, where values had dropped substantially below their pre-war levels.

The third group of maps (figs. 16–21) illustrates the distribution, as well as changes in the value of the components of farm real estate—land and buildings. The value of land and buildings was not ascertained separately in 1935, so that these data show changes only up to 1930. The last section (figs. 22–24) deals with farm-dwelling values in 1930, the only year for which such data are available.

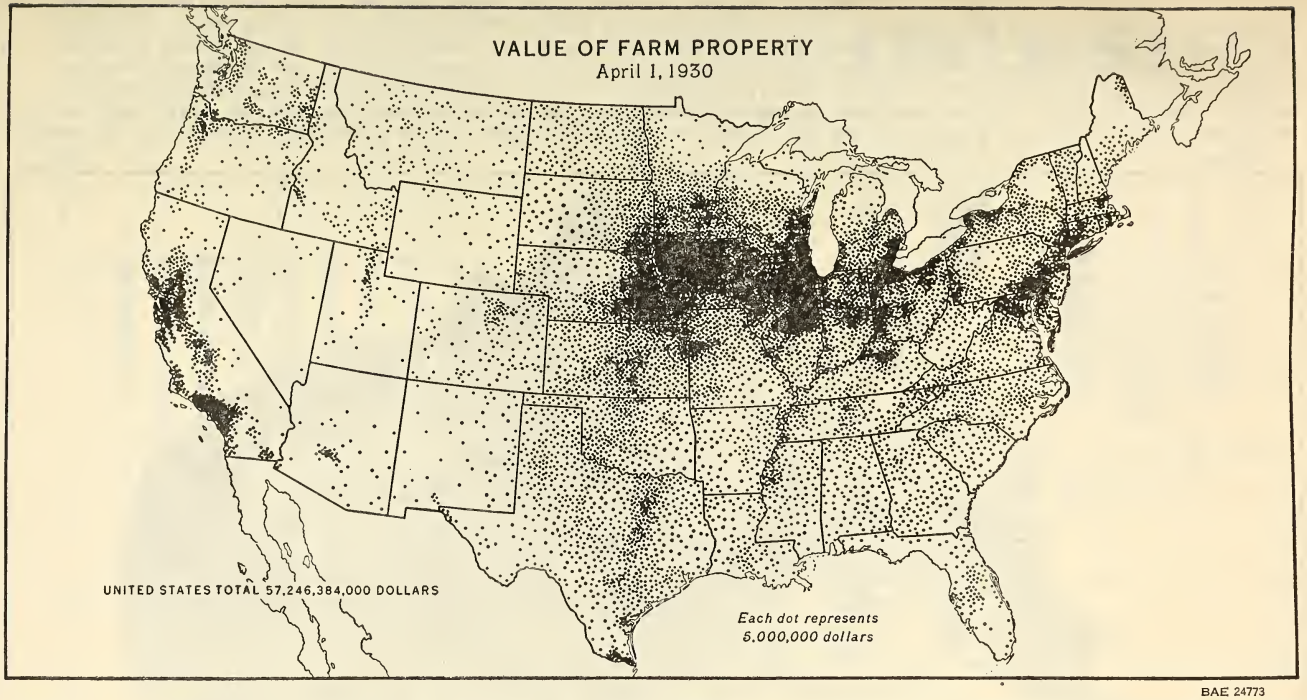


FIGURE 1.—A concentration of value is evident in the Corn Belt, in the vicinity of the large cities, in the more fertile districts of the South, and in the irrigated valleys of the West, particularly in California. Although nearly one-third of the total value of farm property was in the Corn Belt in 1930, the proportion of value centered in this region has been declining since 1920, owing largely to the relatively heavy declines in the Corn Belt in the value of farm land and buildings. For the United States, as a whole, the value of farm land and buildings constituted approximately four-fifths of the total value of farm property in 1930.

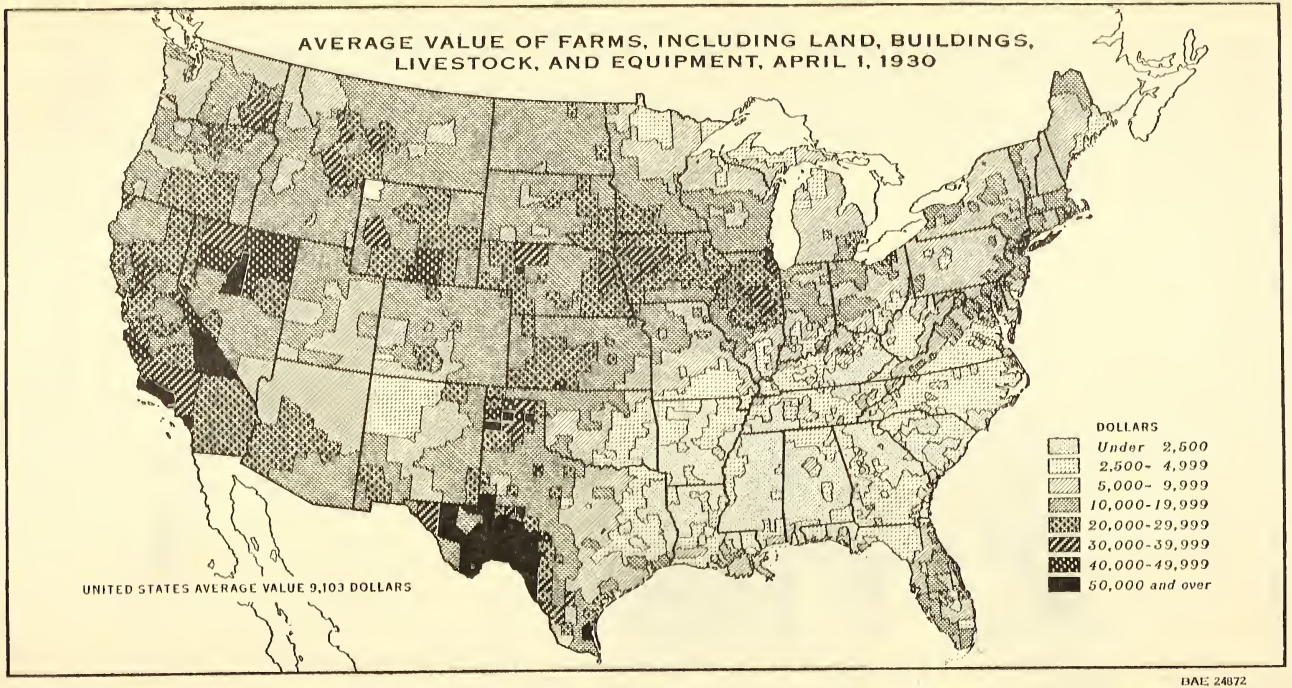


FIGURE 2.—The average investment in real estate, livestock, and equipment for the United States was $9,103 per farm in 1930. This was slightly more than in 1925, but about one-fourth less than in 1920. High average per-acre values associated with farms of moderate size and considerable livestock and machinery result in a rather large average investment per farm in the Corn Belt. In the Great Plains, large acreages offset low per-acre values, while in the Northeast good buildings are associated with a rather small acreage of arable land per farm and moderate values per acre. In the South, smaller farms, including many cropper and tenant holdings, moderate values per acre, and lower building values result in lower total investment.

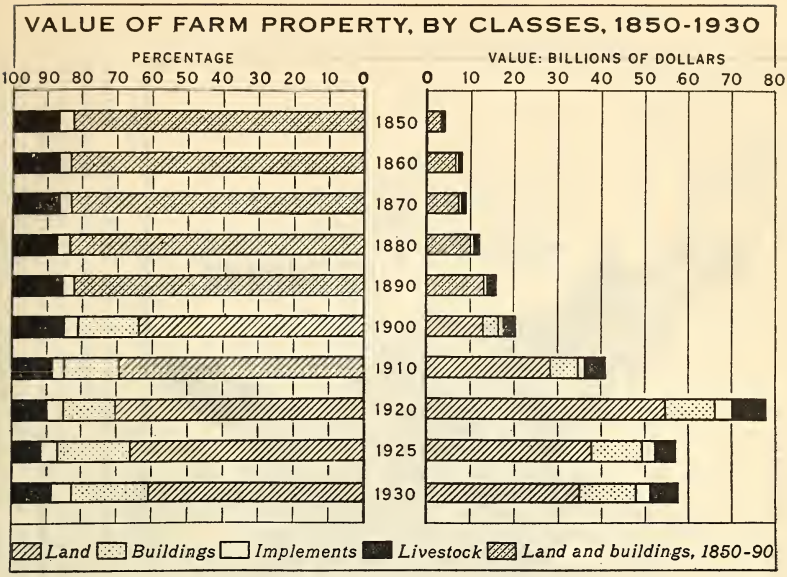


FIGURE 3.—The value of farm property increased with each census period from 1850 to 1920, each class of property contributing to the increase and, until 1900, maintaining approximately the same relative importance. Beginning with 1910 the relative importance of each class has varied. The relative importance of land dropped sharply after 1920, buildings have become relatively more important, equipment has gained, while livestock, after decreasing for three consecutive census periods, regained its 1910 position in 1930.

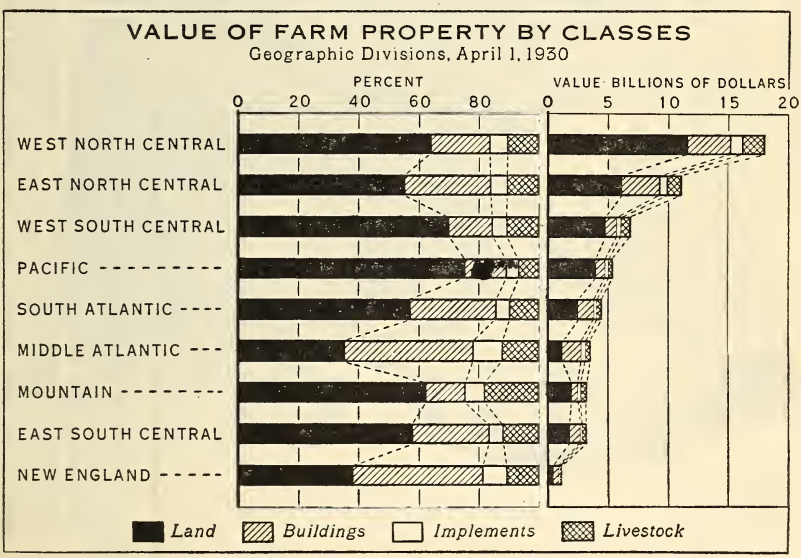


FIGURE 4.—Over one-half of the total value of farm property in the United States was in the North Central States in 1930. The proportion of total value represented by land alone was highest in the Pacific States, and lowest in the Middle Atlantic and New England States, where the value of buildings exceeded that of land alone. The relative importance of livestock was highest in the Mountain States and that of implements in the Middle Atlantic States.

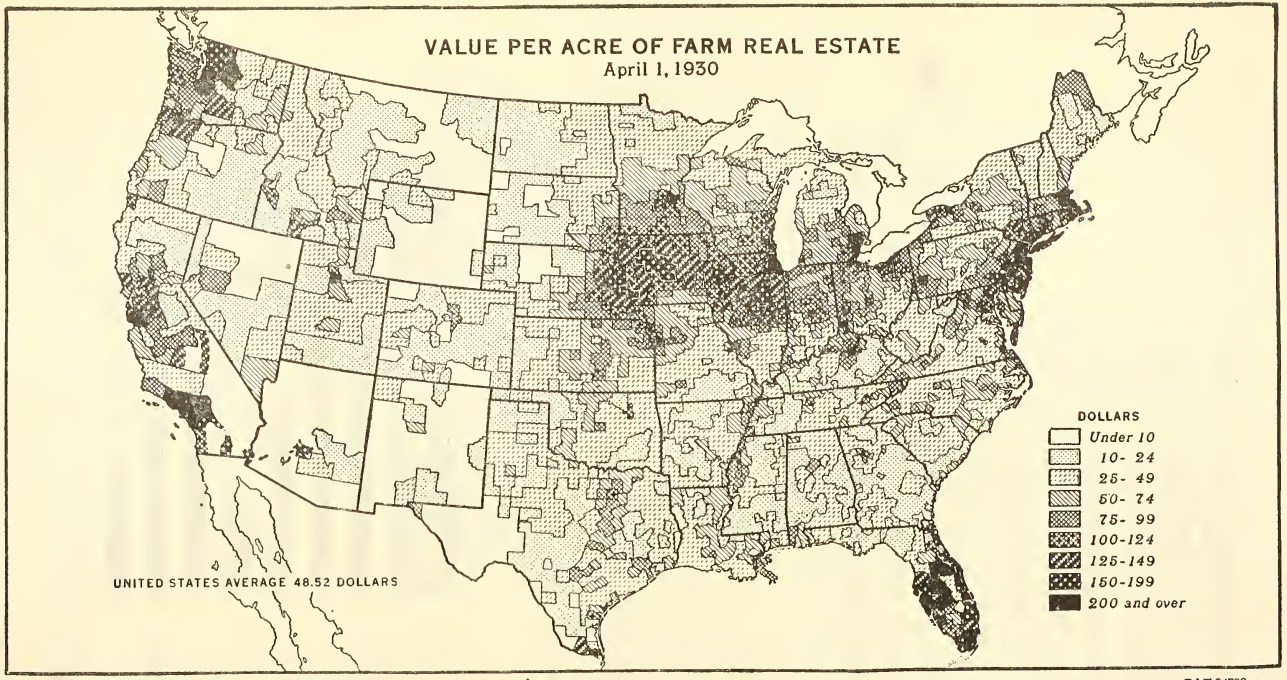


FIGURE 5.—The largest contiguous area of distinctly high-value farm real estate in 1930 was in the Corn Belt. Values were high also in a belt of counties extending from the District of Columbia to Boston, Mass., near large cities throughout the country, in areas of intensive types of agriculture, notably the Florida peninsula and portions of California, in fertile valleys of the Appalachian Mountains and the North Pacific region, and in other areas especially favored by local circumstances. The largest contiguous areas of low-value lands were in the Rocky Mountain States and portions of the South. Between these extremes there was considerable variation, depending on the combination of physical and economic factors peculiar to each region or locality.

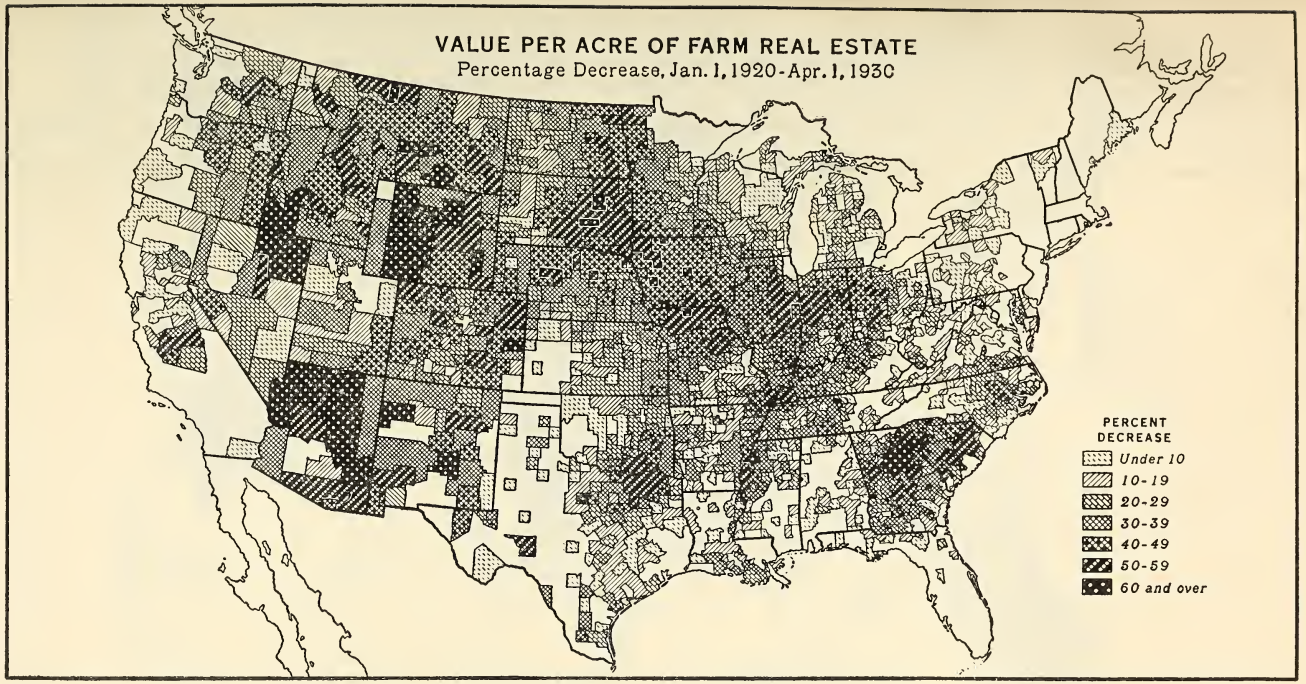


FIGURE 6.—The average value per acre of farm real estate for the United States as a whole declined approximately 30 percent from 1920 to 1930. With the exception of areas that were undergoing a transition from a less intensive to a more intensive use, the declines were fairly widespread throughout the more commercialized farming regions, being especially pronounced in the North Central States (where very high prices had been reached during and after the World War), in South Carolina and Georgia (where the boll weevil had caused widespread devastation), and in the Rocky Mountain States. In many of the States in the last-named region increases in the reported acreage in farms were responsible for a substantial part of the declines.

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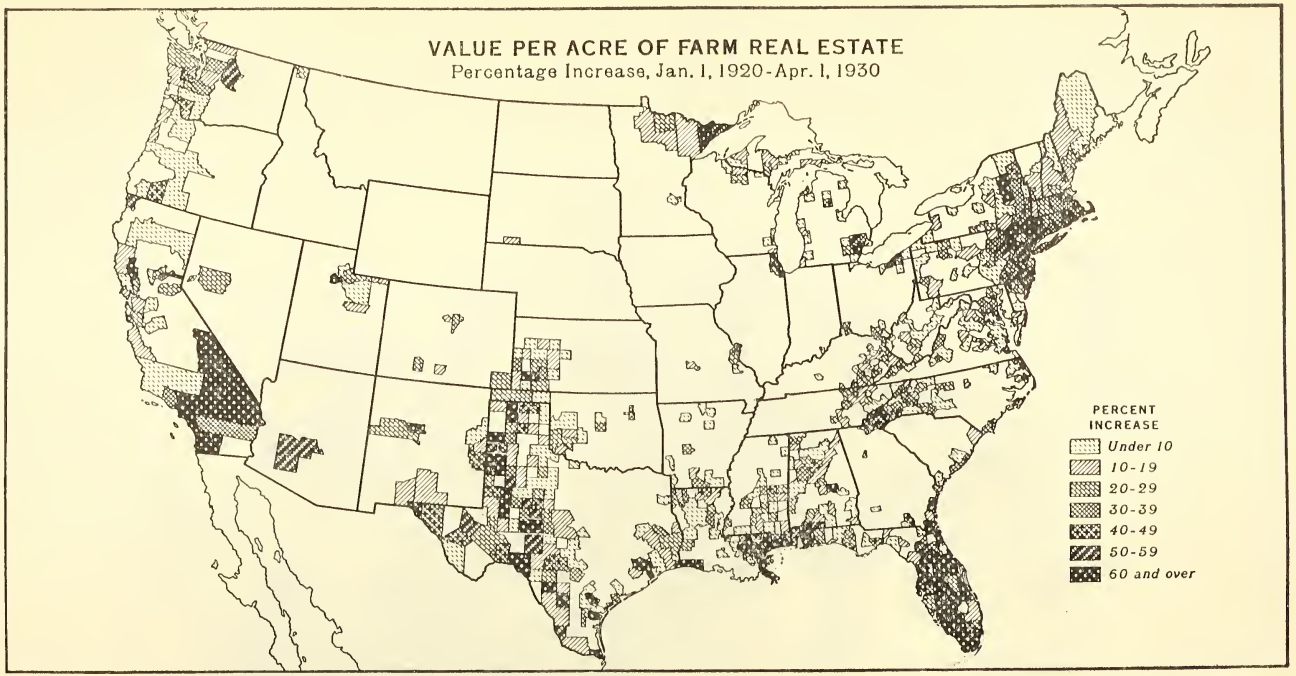


FIGURE 7.—The trend of farm real estate values was predominantly downward from 1920 to 1930, but there were limited areas and some entire States in which values increased. Shifts in types of farming, notably from grazing to grain and cotton production in western Texas, proximity to growing metropolitan centers, and the development of irrigation areas were among the sectional and local factors which significantly affected value trends during the decade. The State average increased in each of the North Atlantic States, as well as in Florida, Alabama, and California. In the remaining 36 States average values declined.

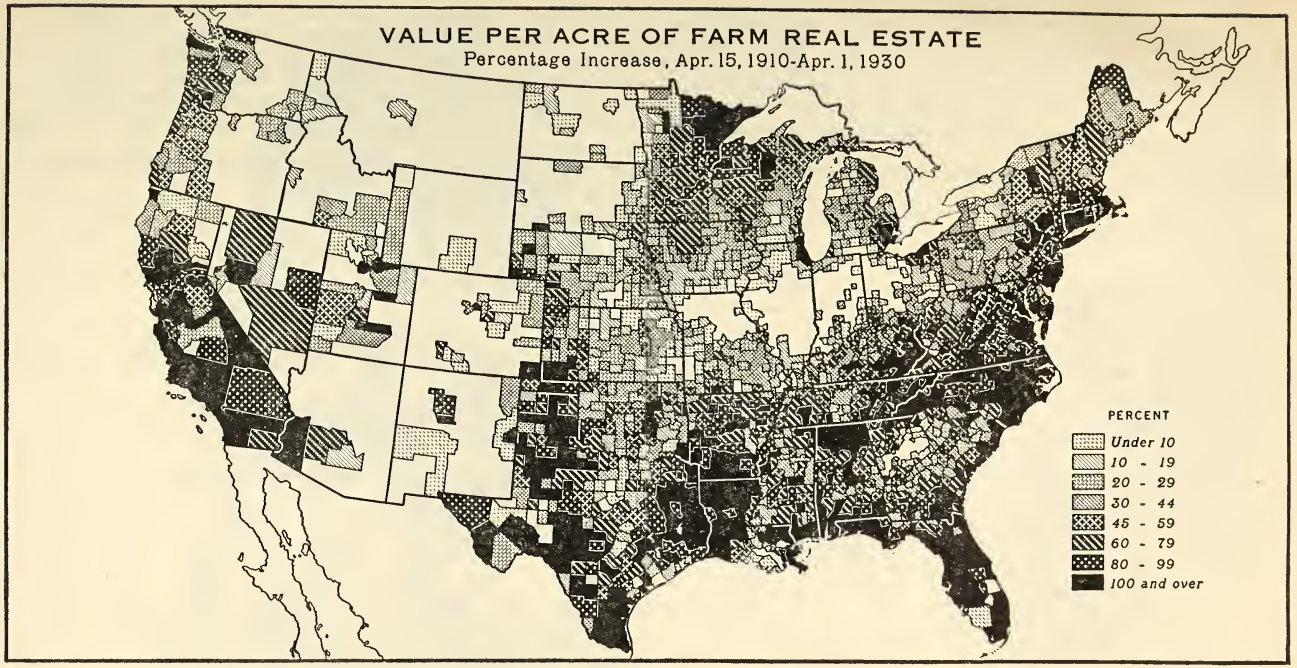


FIGURE 8.—For the United States as a whole, the average value per acre of farm land and buildings increased 75 percent from 1910 to 1920, and then decreased 30 percent during the following decade, a net increase of 23 percent. The net increases in per-acre values appear to be more pronounced in areas that were influenced by the withdrawal from the farm area of substantial low-value acreages, areas adjacent to metropolitan centers, areas affected by shifts in type of farming, and areas characterized by relatively low per-acre values for the land already in farms in 1910.

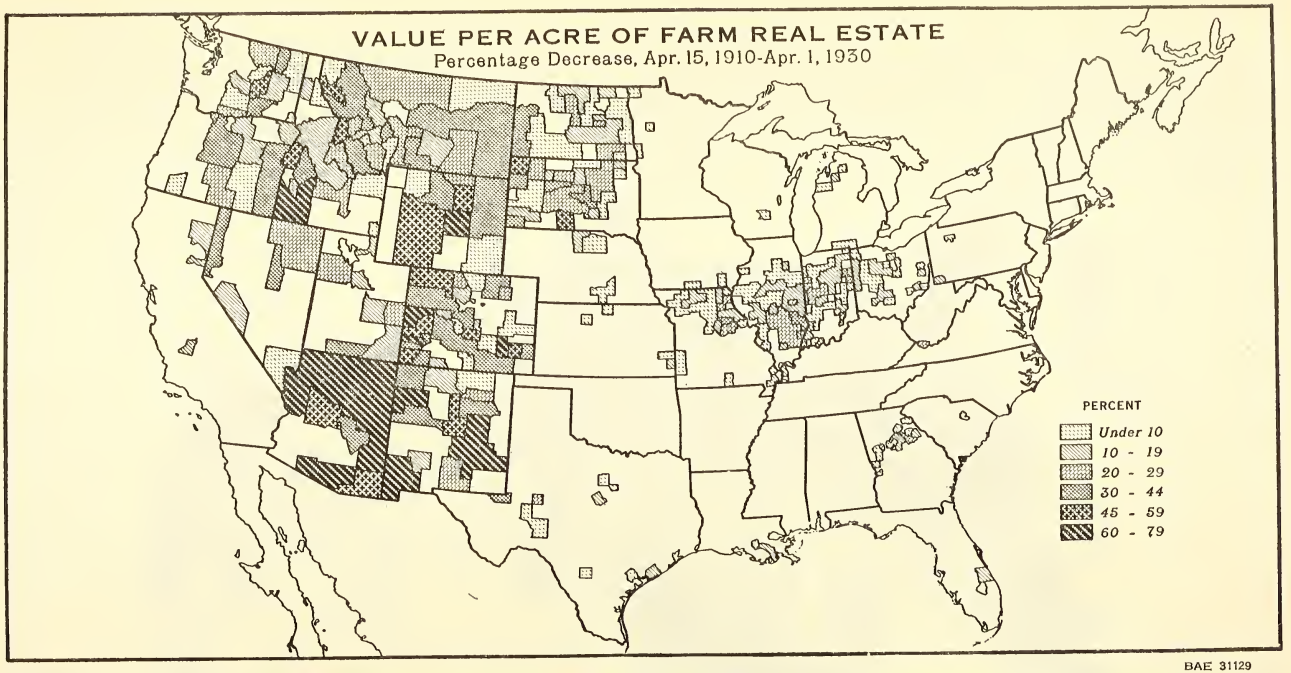


FIGURE 9.—From 1910 to 1930 farm real estate values per acre showed a net decline in many of the Western States, where land reported in farms expanded greatly from 1910 to 1930, raising the aggregate value but resulting in a lower average value per acre. In parts of the eastern Corn Belt, and in northern Missouri, acre values had already reached a relatively high level by 1910, and the changes of the next two decades finally resulted in values that were below the 1910 average. Idle and abandoned land in farms in the Georgia Piedmont, resulting to a considerable extent from acute soil erosion, and boll-weevil infestation, accounts in large part for the decline in that area.

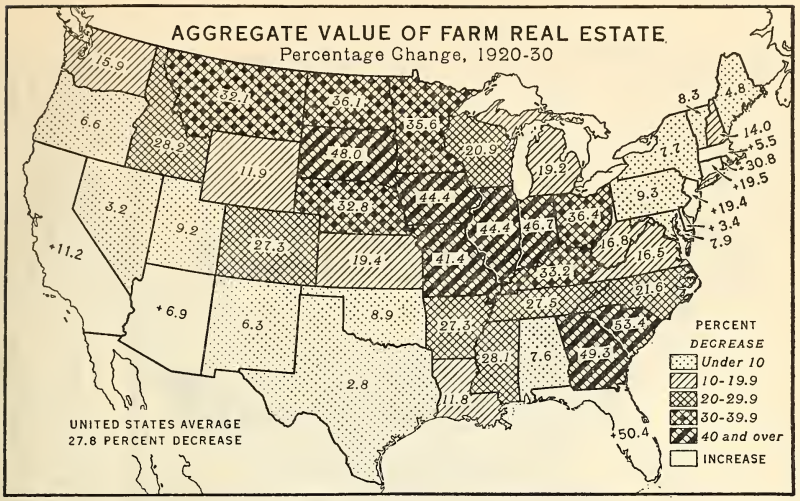


FIGURE 10.—The aggregate value of farm land declined 36 percent from 1920 to 1930 in the United States as a whole, but the value of buildings increased 13 percent. The net result was a decrease in the aggregate value of farm real estate of 28 percent. Each of the seven States reporting declines of 40 percent or more in the aggregate value of farm real estate experienced declines of approximately 50 percent or more in the value of land. In the seven States reporting increases in total value, declines in the value of land were limited or the value increased.

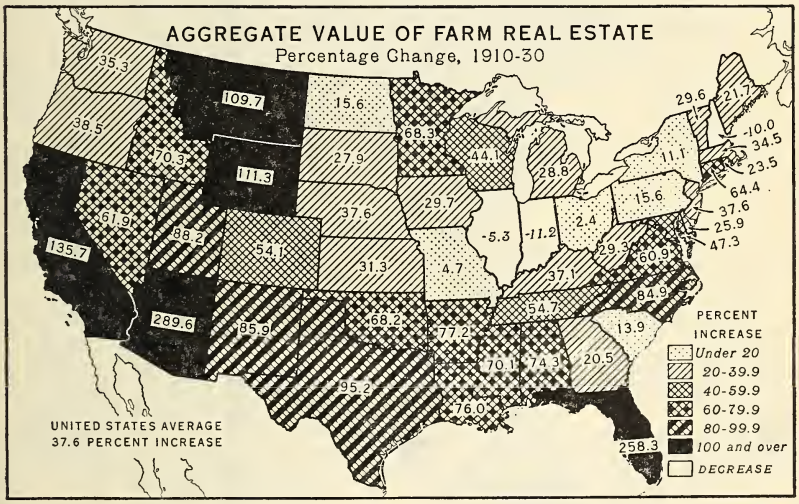


FIGURE 11.—For the United States as a whole, the aggregate value of farm real estate in 1930 was slightly more than one-third higher than in 1910. The net proportion of increase in value was considerably greater west than east of the Mississippi. This difference was caused in a substantial degree by the expansion of acreage in the West, which reduced the average value per acre, but raised the aggregate value, and to decreasing acreage in parts of the East. In three States, all east of the Mississippi, the aggregate value was lower in 1930 than in 1910.

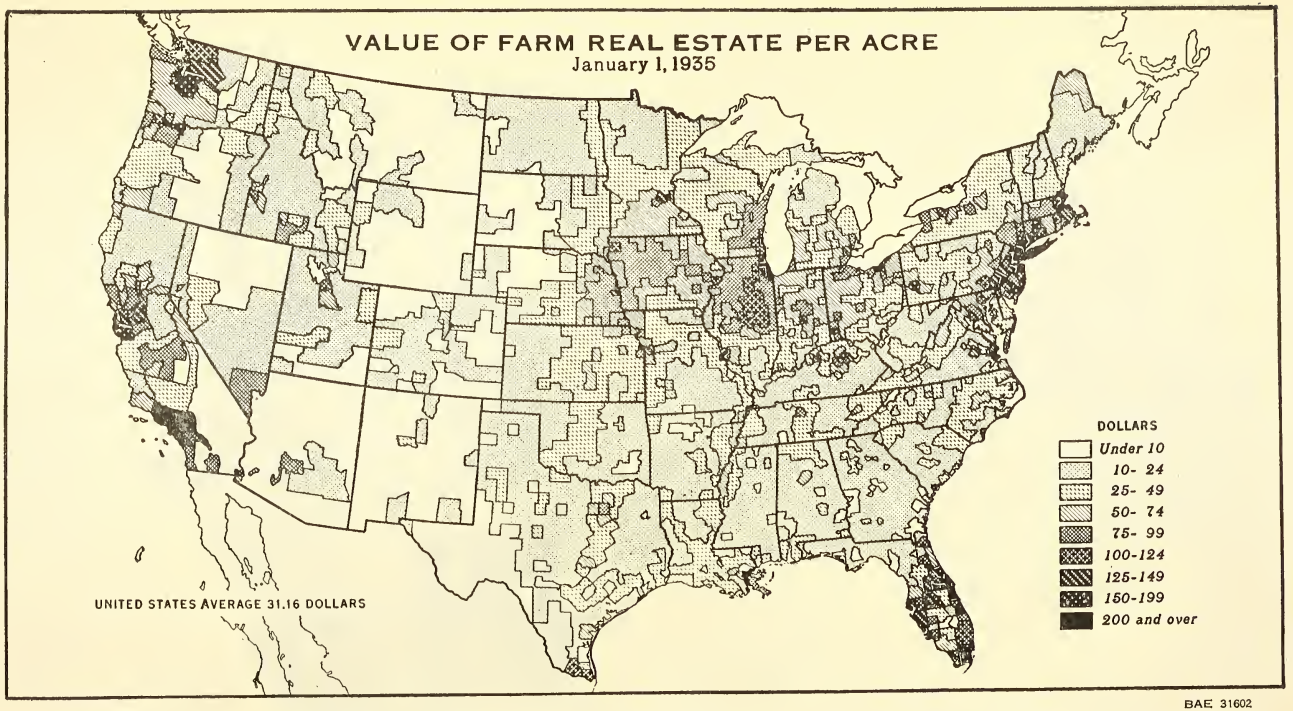


FIGURE 12.—Farm real estate values declined substantially in all but a few local areas after 1930 (see fig. 5). Despite greater declines in the Corn Belt, average per-acre values were still higher in this region than in most other regions in 1935. Values in the Corn Belt averaged $58 per acre in 1935, as compared with $46 in the hay and dairy regions, $22 in the Cotton Belt, $19 in the Wheat Belt, and $31 in the United States as a whole. In other high-value areas, especially those near large cities, values declined relatively less from their 1930 levels than in the Corn Belt. Average per-acre values in 1935 were below those of 1910 in the Corn Belt and the Cotton Belt, as well as in the United States as a whole.

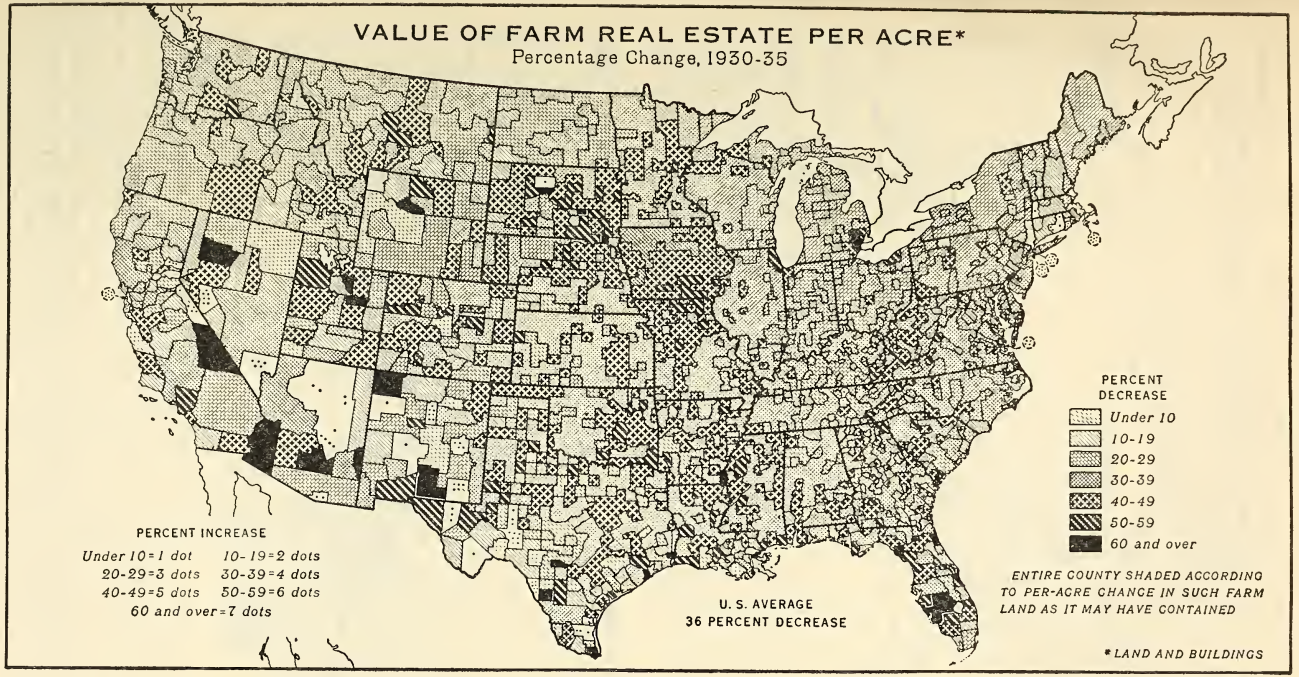


FIGURE 13.—The Nation-wide character of the decline in farm real estate values that took place after 1930 is indicated by the fact that nine-tenths of the counties in the United States experienced declines of 20 percent or more, while values dropped 30 percent or more in over two-thirds of the counties. These high-relative declines over extensive areas suggest the size of the absolute decrease that took place in such high-value areas as the Corn Belt. In that region average values dropped from $94 to $58 per acre. The relative decline as well as the absolute decline in the other major agricultural regions was less.

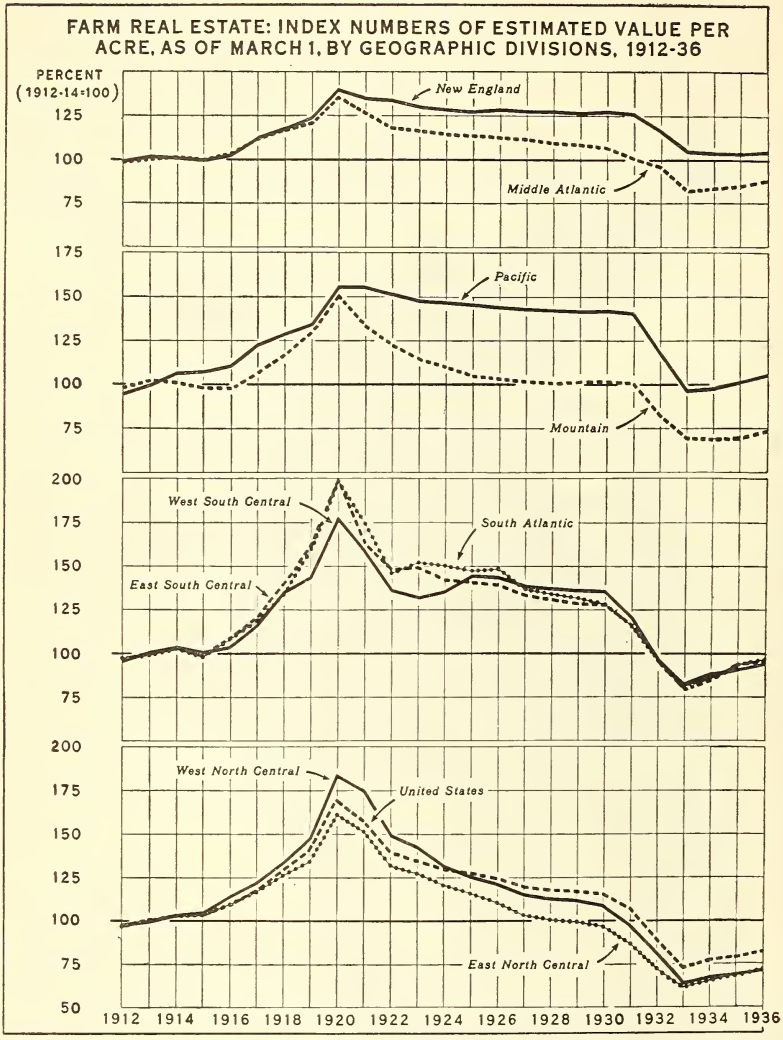


FIGURE 14.—Considerable regional variation is shown in the extent of changes in farm real estate values from 1912 to 1936. Values in the North Central, South Central, South Atlantic, and Rocky Mountain States rose rapidly until 1920 and then declined rather sharply. Values in the North Atlantic and Pacific States rose less rapidly, the higher levels reached in 1920 were substantially maintained until after 1930, when values in all regions declined sharply. By 1933, values in all regions except New England were below their pre-war levels. Since 1933 the movement has been upward.

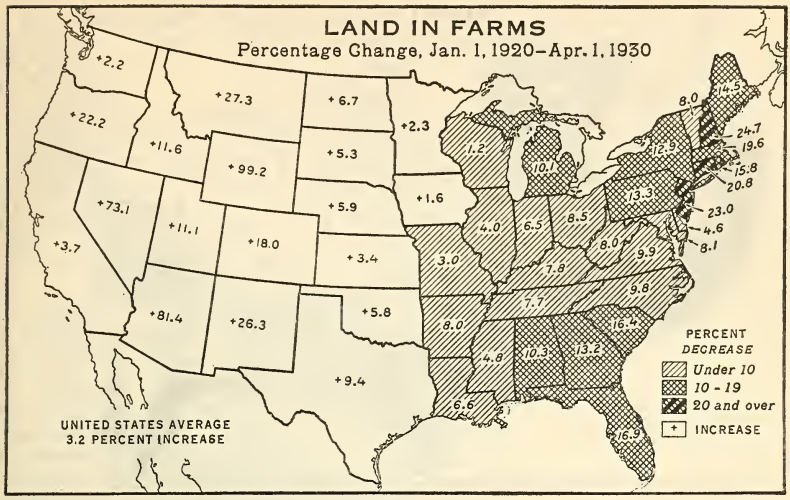


FIGURE 15.—When interpreting changes in either per-acre values or in the aggregate value of farm real estate from 1920 to 1930, consideration needs to be given to changes in the acreage of land in farms. In the East, withdrawal of land principally of low productivity from agricultural use, although reducing aggregate values, has tended to raise the average per-acre value for the land remaining in farms. A converse situation has arisen in the West through the addition of low-value lands to farm acreage.

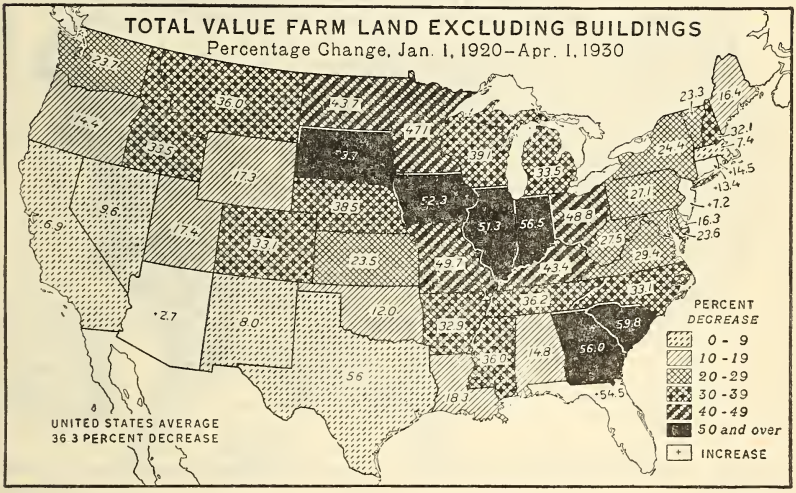


FIGURE 16.—Over five-sixths of the decline that took place in the total value of farm land, excluding buildings, between 1920 and 1930 occurred before 1925. Lower per-acre values explain in a large part the declines in total land values, although in the East the decline in total value is accounted for in part by decreases in farm acreage, and in the West increases in acreage offset in part the effects of lower per-acre values.

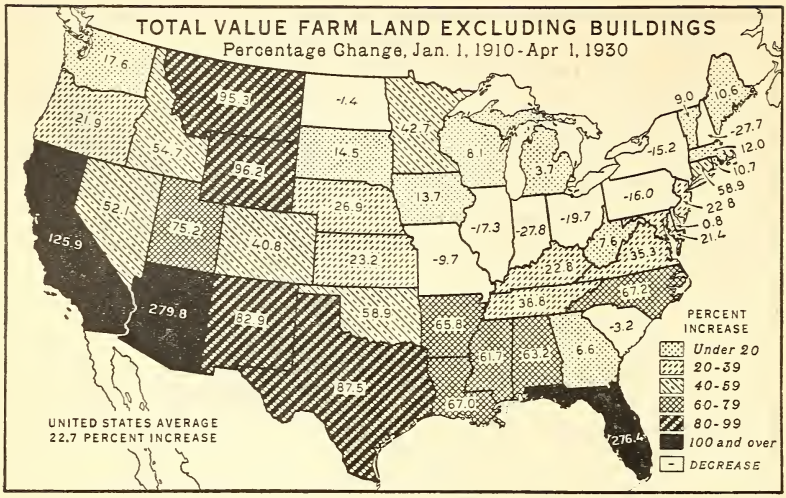


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FIGURE 17.—The total value of farm land, excluding buildings, in the Nation as a whole, increased over 90 percent from 1910 to 1920 and then declined 36 percent by 1930, the net increase being about 23 percent for the 20-year period. The total value of farm land increased in 39 States, and decreased in 9 States. As with the changes from 1920 to 1930, changes in acreage reported in farms were important in explaining the increases in the West as well as the declines in the East.

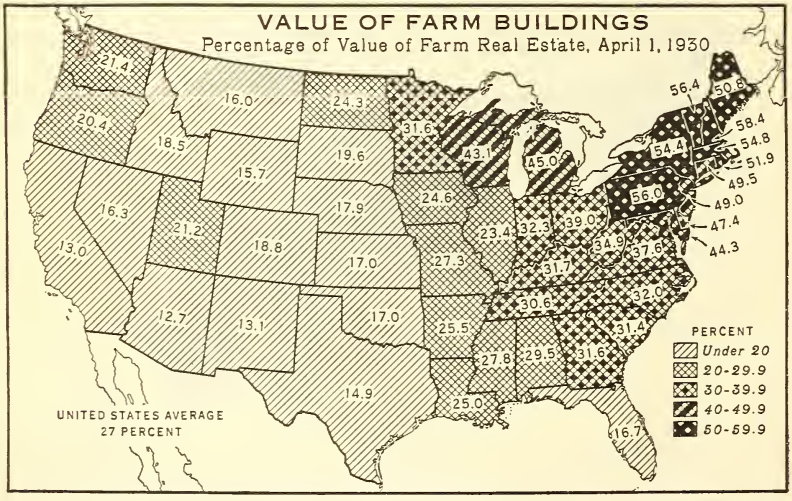


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FIGURE 18.—Each of the North Atlantic States reported total farm building values in 1930 that about equaled or exceeded the value of land alone. Building values represented more than one-fifth of the total value of farm real estate in all States in the eastern half of the United States except Florida. Only four States in the western half reported such high proportions. Building values constituted 27 percent of the value of farm real estate for the United States in 1930, as compared with 24 per cent in 1925.

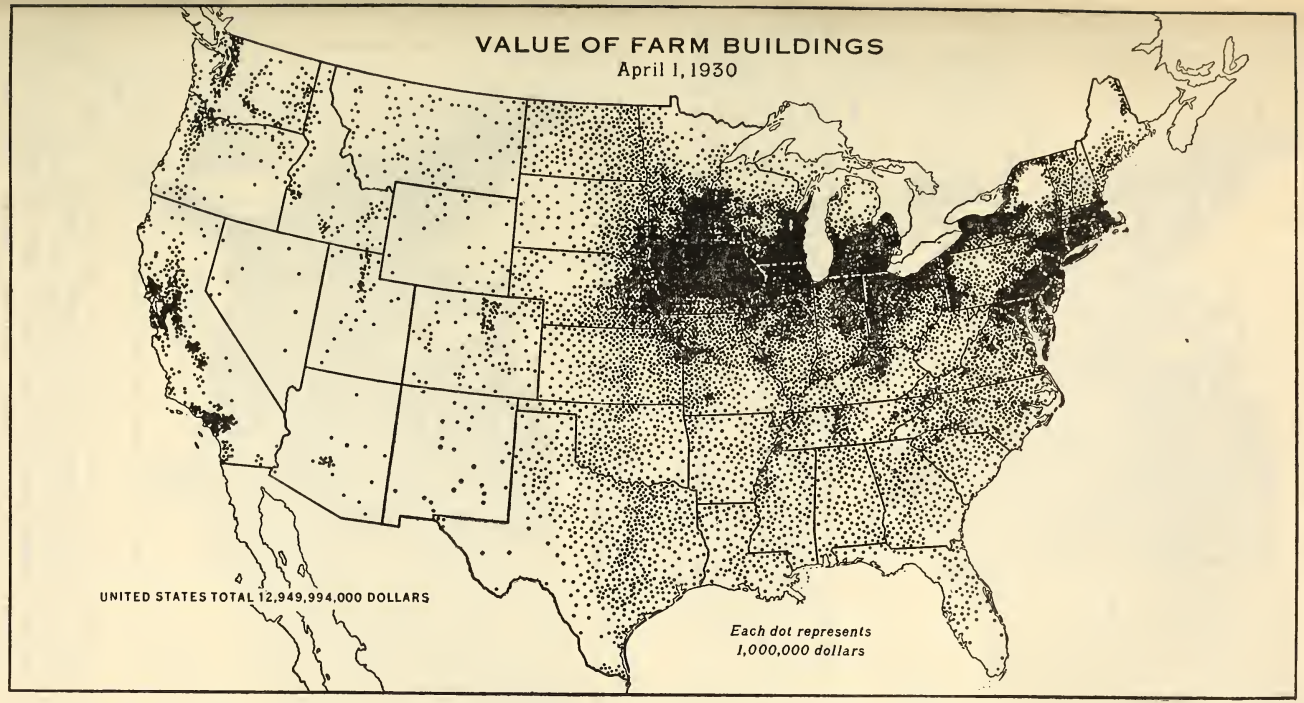


FIGURE 19.—There is a general similarity between the geographic distribution of value of farm buildings and that of total farm property (see fig. 1), but building values are somewhat more heavily concentrated than are total values in the North and East, particularly in southern New England, eastern Pennsylvania, and Maryland, as well as in the southern portions of the Lakes States. The distribution of building values is very similar to that of total values in the Corn Belt, in the vicinity of large cities, and in other local areas. The extent and character of livestock enterprises, climatic conditions, type of tenure, social standards, and historical characteristics of the various areas affect the distribution of building values.

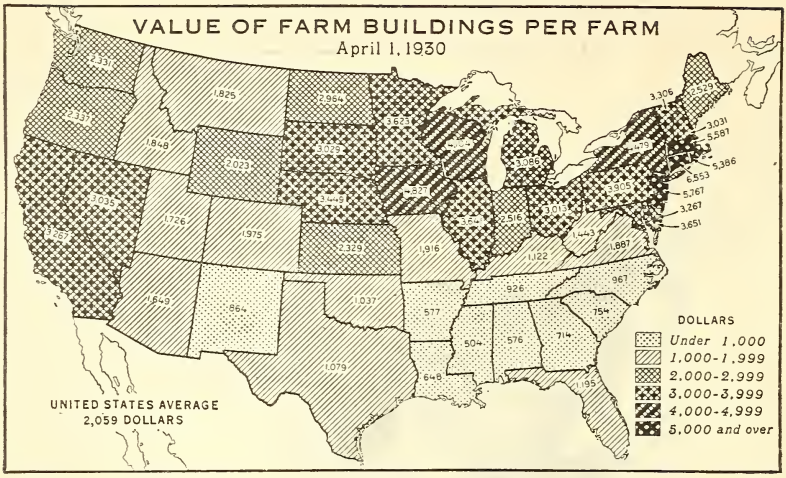


FIGURE 20.—The highest State averages for farm-building values were reported in Connecticut, New Jersey, Rhode Island, and Massachusetts in 1930. The average value of over $5,000 per farm was approximately equal to or in excess of the value of the land alone. Throughout the Corn Belt, the Lakes States, and the Pacific Coast States, average building values, though not so high as in the Northeast, exceeded the United States average of $2,059. But in most of the South, the value of buildings averaged less than $1,500, and in nine States, less than $1,000.

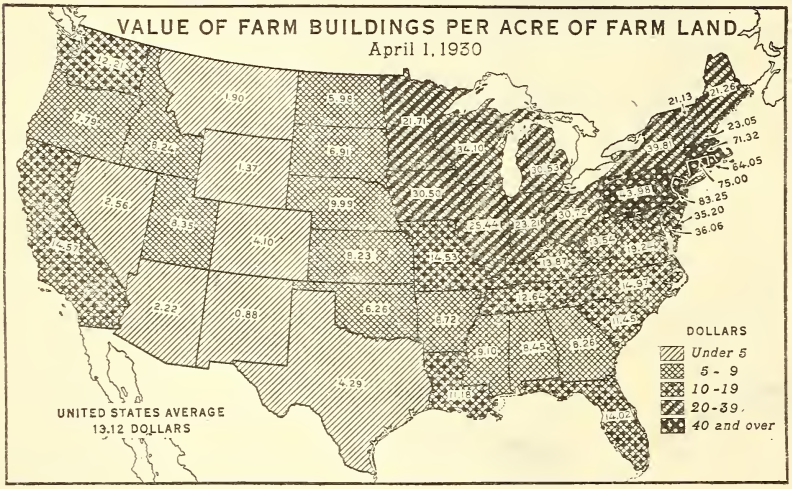


FIGURE 21.—The average value of farm buildings per acre in the United States was $13.12 in 1930, or over one-fourth of the average value per acre of farm real estate. Average building values of over $60 were reported in New Jersey, Rhode Island, Connecticut, Massachusetts; and all States east of the Dakotas and north of the Ohio River reported average values of over $20 per acre. Largely because of the larger size of farms, values averaged less than $5 per acre in Texas and in all but two of the Mountain States.

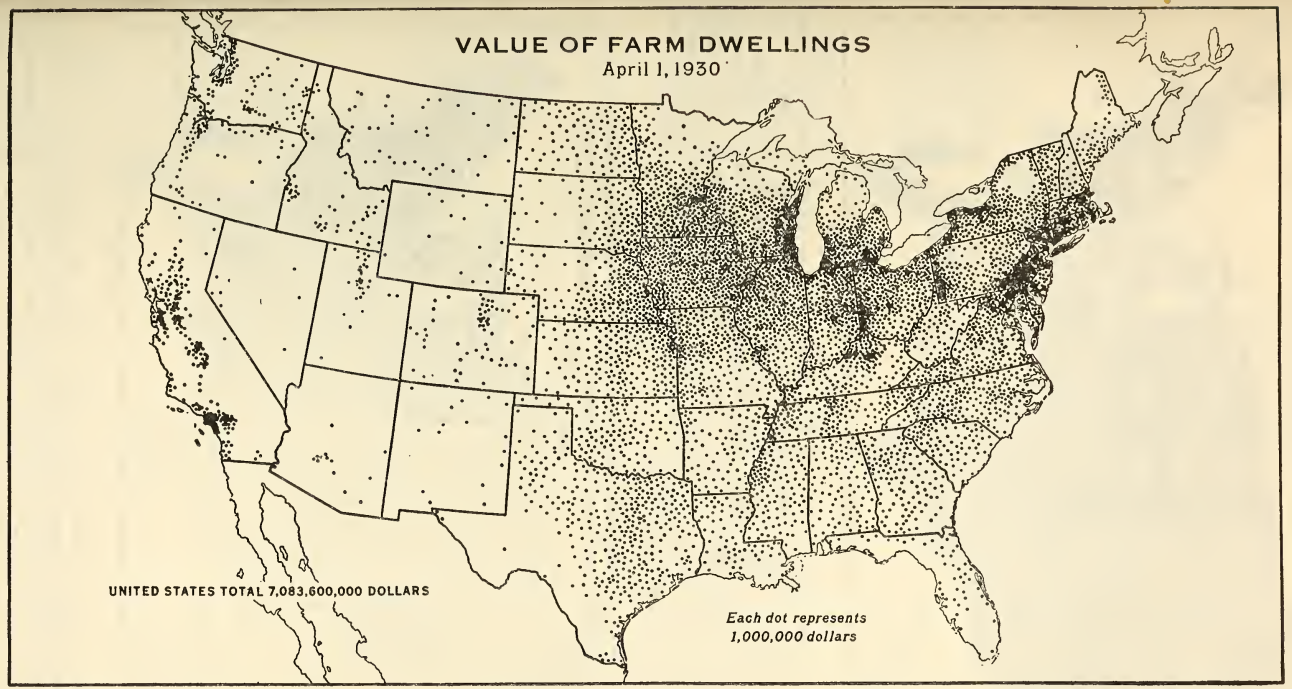


FIGURE 22.—For the United States as a whole, the value of farm dwellings constituted 55 percent of the total value of all farm buildings in 1930. The distribution of dwelling values corresponds roughly with the distribution of building values, although the percentage of the total value of dwellings located in the South and the West is higher than in the case of all buildings. The concentration of values about metropolitan centers is also more apparent in the case of dwellings than of all buildings. It is probable that valuations reported in these areas reflect, in part, values derived from other than strictly agricultural use.

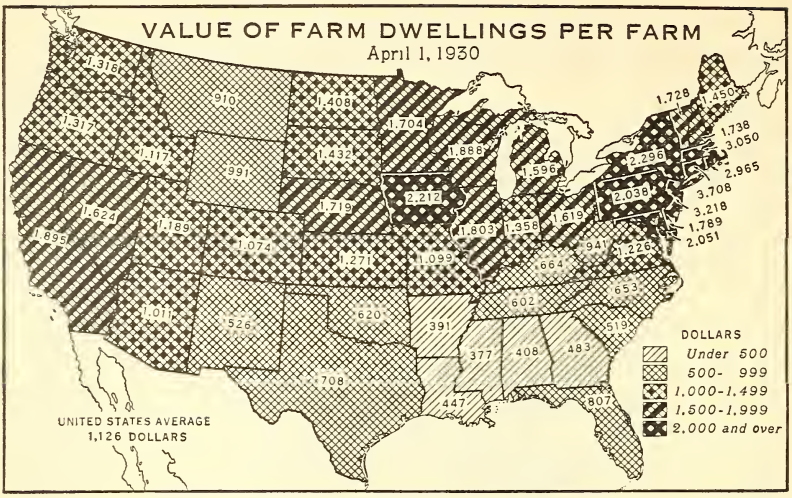


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FIGURE 23.—Average values of farm dwellings of over $3,000 per farm were reported in Connecticut, New Jersey, and Massachusetts, in 1930. This was approximately three times the United States average of $1,126. In New York, Pennsylvania, Rhode Island, Maryland, and Iowa, the average value was more than $2,000. The value of farm dwellings in most of the South averaged less than $1,000 and in five States was below $500. Nearly three-fourths of the dwellings of tenants and croppers in the South were valued at less than $500 per farm.

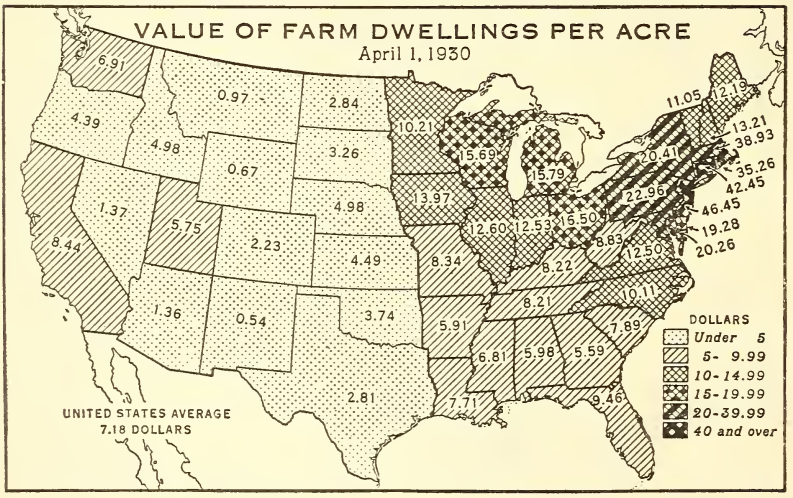


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FIGURE 24.—Variations between States and regions in the per-acre value of farm dwellings reflect in part the variations in type-of-farming and climatic requirements as well as the social standards and historical development of the area. They also reflect in part the differences in the capacity of the land to carry various levels of dwelling values. Variations in dwelling values correspond in general with variations in farm-building values, although the proportion represented by dwellings is higher in the South and the West than in the North.

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